



**YORK TRANSPORT EQUIPMENT PTY LTD**

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**YORK TRAILER AXLE  
SERVICE MANUAL**

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## **SERVICE INFORMATION & WARRANTY CONDITIONS**

### **York Trailer Axles**

York trailer axles are guaranteed as set out in the Warranty document. Further to all of the stipulations therein, attention to the following is crucial to that warranty:-

- (i) No York axle should be loaded to more than the design load of 10 tonnes or the design load agreed to by York (in writing) for any particular application.
- (ii) York axles must not be operated with the brake torque (chamber size and lever length) in excess of the Australian Design Rule compliance for that trailer.
- (iii) All welding to York axle beams should be carried out strictly in accordance with York's technical specifications.
- (iv) At point of manufacture, York have adjusted the wheel bearings in accordance with York's technical specification. This must be checked at the first 5000 Km service and readjusted, if necessary, to be within this range.
- (v) York have marked the outer nut at the spindle keyway to provide a reference to the initial factory setting. When the bearings have been readjusted the mark might not be at the keyway, this will be because of the bearings "settling in" during the initial service period. The locknut must be re-torqued to 380 to 400Nm each time the bearings are rechecked.
- (vi) Operation of York axles in correctly specified applications, with regular inspection adjustment and lubrication is vital to ensure maximum life of all components and to comply with York's warranty conditions. The enclosed Service Information Data sheet sets out the minimum servicing requirements.

**YORK TRANSPORT EQUIPMENT PTY. LTD.**



## **YORK TRAILER AXLES**

### **First 500 Kilometres**

Check tightness of all wheel nuts - On delivery  
- After wheel changes

**NOTE:** Recommended torque settings, dry threads (the use of power tools for torque settings is not recommended)

<b>1. WHEEL NUTS</b>	- (Note: 1ft/lb = 1.36Nm)
ISO M22 studs	- 550/600 Nm
ISO M24 studs	- 650/750 Nm
BSF 7/8" BSF studs	- 475/540 Nm
DIN 22mm studs	- 515/540 Nm
Japanese M20 studs	- 400/440 Nm
Japanese M24 studs	- 650/750 Nm
Spider Hubs 3/4" UNC	- 200/260 Nm

### **2. CAMSHAFT BRACKET SETSCREWS**

M12	- 90/100 Nm
M10	- 30/35 Nm

Lubricate camshaft grease nipples using Castrol APXT grease or an approved YORK equivalent.

1st Service / 5,000 km - Full bearing adjustment.

1st & every 5,000 km - Check and adjust brakes and check brake linings for wear.

Every 25,000 km - Lubricate slack adjuster and camshafts using Castrol APXT grease or an approved YORK equivalent.  
- Rotate wheels and check wheel bearings to ascertain if there is excessive bearing movement. Readjust as necessary.

Every 100,000 km - Remove hubcaps, inspect bearings and lubrication. Readjust and re-torque the outer nut, resecure lock tabs.  
- Visually check the axle and ancilliary components for cracking, damage and wear. Repair or replace as necessary.

Every 300,000 km - Remove, wash and inspect wheel bearings, replace if necessary.  
- When re-assembling, bearings must be properly lubricated and adjusted to York's specifications. **IMPORTANT NOTE** - If the operating service conditions are severe, this procedure may be required at more frequent intervals. Re-adjust bearings after 5,000 km, if bearings are replaced.

**BEARING LUBRICANTS:** GREASE - Castrol APXT grease or approved equivalent.  
OIL - EPX 85W/140 or approved equivalent.

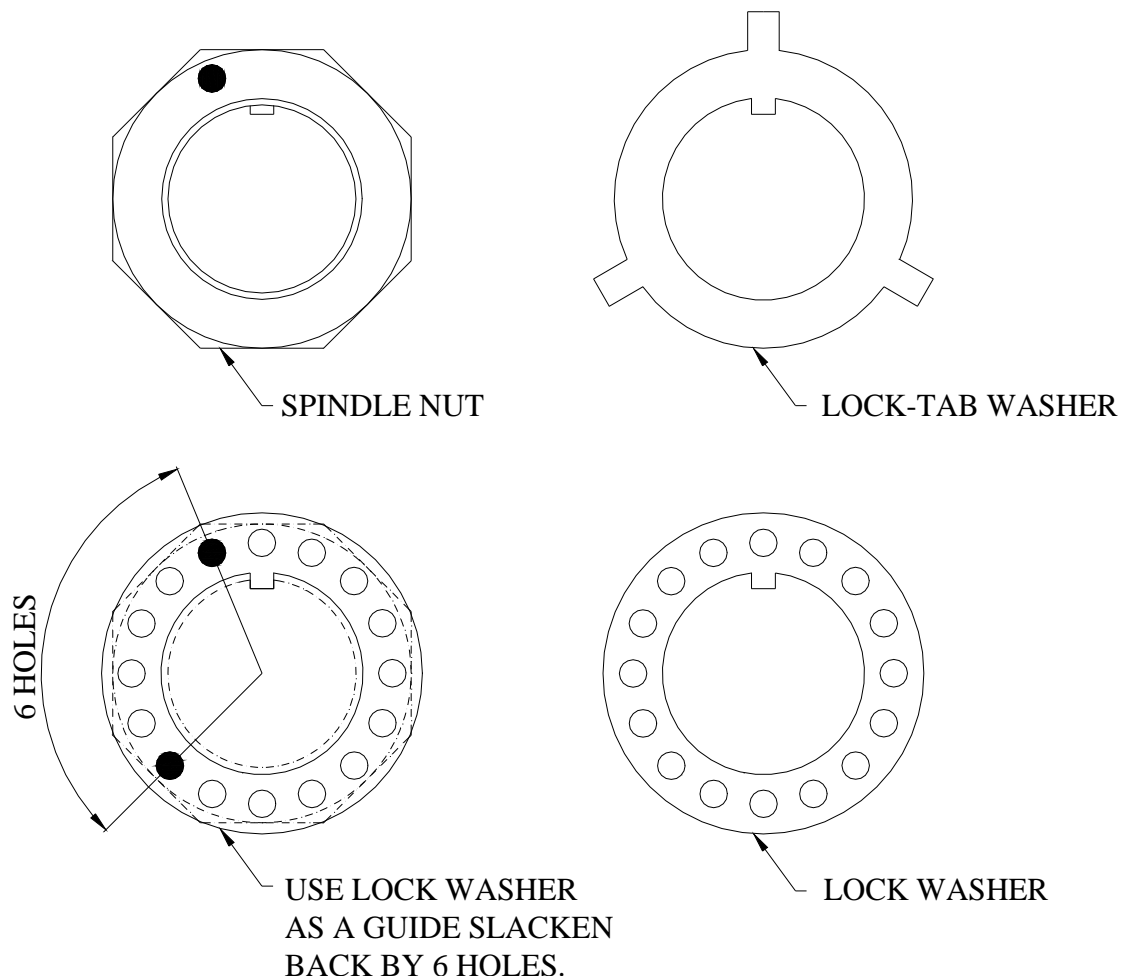
# YORK TRAILER AXLES

## Wheel Bearing Adjustment

We recommend that all axles should have the wheel bearings adjusted initially after the first 5,000 km and then at 100,000 km intervals. This does not preclude the need for inspection and adjustment as necessary every 25,000 kms if service conditions require this.

The recommended wheel bearing adjustment procedure is:-

1. Make sure that the hub revolves freely and if necessary temporarily slacken off the brake adjustment to ensure complete freedom from brake binding (drag).
2. Rotate the hub in both directions at the same time tightening the bearing adjusting nut. Continue until a binding is felt and a torque setting of 110/130 Nm is reached.
3. Using the lockwasher as a guide, slacken the adjusting nut back 6 holes (approximately one third of a turn) and refit the lockwasher. Fit the lock-tab washer. Taking care that the adjustment is not disturbed, fit and tighten the axle locknut to 380/400 Nm. Check that the hub and drum rotates freely. Bend the tabs on the lock-tab washer over to prevent the locknut coming loose in service.



**IMPORTANT: CHECK END FLOAT IS 0.05mm TO 0.11mm. IF NOT, READJUST**



## **Con Met PreSet Hubs**

Note: PreSet hubs are designed for extended service without any maintenance. If circumstances (overhaul, accident, abuse etc.) indicate service is required, PreSet hubs should be serviced with the close tolerance bearings indicated on the "Part Number Identification" chart. In the event that these bearings are not available, standard bearings can be used by following the conversion procedure below.

**IDENTIFICATION:** See "Part Number Identification" table on page 7.

### **HUB MAINTENANCE:**

1. Thoroughly clean and inspect any hub that has been removed for service. Discard used seals and gaskets. Use new seals and gaskets on reinstallation and replace worn or damaged parts.
2. Clean and inspect the wheel bearings, spacer and hub each time the hub is removed or when contamination is evident. If a bearing, cup or spacer needs to be replaced, replace all bearings and cups. See "Bearing Cup Replacement" under "Hubs with Manually Adjusted Bearings." Also, replace the spacer if it shows signs of damage. See the "Part Number Identification" chart for part numbers.
3. If, in case of emergency field repair, the PreSet hub bearings as listed in the identification chart are not available, your PreSet hub can be easily converted (see "Conversion Procedure" below) into a conventionally manually adjusted hub and bearing set by removing the spacer. Be sure to follow the manual bearing adjustment procedure (see "Specifications") if you convert your PreSet hub to the manually adjusted system.
4. For additional service information, see the required topic under "Hubs with Manually Adjusted Bearings".

### **CONVERSION PROCEDURE:**

If any parts identified as manual adjust parts are used to service a PreSet hub follow the procedure below.

1. Remove the tubular spacer from the assembly. It is not used when the bearings are manually adjusted. Save the tubular spacer so the hub can be converted back into a PreSet hub.
2. Assemble the hub onto the spindle as a conventional hub and bearing assembly, as described in the section "Hubs with Manually Adjusted Bearings."
3. Use a spindle lock nut system as used on manually adjusted hubs to establish the bearing adjustment.
4. To return the hub to Preset configuration, replace all manual adjust cups, cones and seal with the PreSet parts listed in the "Part Number Identification" chart. Next, install the hub with the spacer following the instructions for "Installation" on page 7.

## **Hubs with Manually Adjusted Bearings.**

### **HUB MAINTENANCE:**

1. Clean and inspect the wheel bearings and seal bore each time the hub is removed or when contamination is evident. Replace damaged bearings and cups as a unit (see "Bearing Cup Replacement").
2. See axle manufacturers publications for lubrication requirements and bearing service intervals.



# Wheel Stud Removal

## DETERMINATION OF DAMAGED WHEEL STUDS:

1. Replace wheel studs that have damaged or distorted threads, are broken or bent, or are badly corroded. Also, replace the stud either side of the stud being replaced due to damage. If two or more studs have damage, replace all the studs in the hub.
2. Always use appropriate safety equipment and take appropriate safety precautions for the job. Safety glasses, gloves, ear protection etc., will be necessary depending on the equipment and process.

## WHEEL STUD REMOVAL:

1. Place the clean hub on a press with the hub supported evenly around and adjacent to the stud being removed.
2. Be sure the hub supported so that it will not tip when force is applied to the stud. Then press the stud out of the hub.  
The configuration of some hubs is such that it is impractical to have supports that will prevent the hub from tipping when force is applied to the stud. If that is the case, support the hub on wood blocks on the floor and use a hammer to drive the studs out with several sharp blows. Be careful to avoid damage to the hub, particularly to the seal bore and ABS ring.

## Wheel Stud Replacement

1. Check stud length to verify that the stud stand out will be correct.
2. To Install a new stud, support the hub evenly around and adjacent to the stud being installed.  
**Caution:** Some studs have a flat edge on the head. Be sure that the edge is line with the groove or shoulder on the head.
3. Press the new stud all the way into the hub. Be sure the stud is fully seated and that the stud head is not embedded into the hub.

**WARNING!** If the stud head is embedded into the hub, the hub should be replaced.

## Bearing Cup Replacement

1. Separate the hub from the spindle and wheels.
2. Thoroughly clean and degrease the hub with a nonflammable solvent.
3. It is recommended that the hub be heated evenly throughout in an oven or in boiling water to 175-215°F. See below for an alternative method.
4. Remove the hub from the oven or water and quickly press out the bearing cup. Take care to avoid damage to the bearing cup bore and shoulder. (*Variations within tolerances of materials and oven temperatures may allow the bearing cup to drop in and out easily*).

## Alternate Procedure:

Use an electric welder to weld a large bead around the bearing surface of the steel cup. Do not spatter weld on to the hub. Let the assembly cool, or quench it in water. The weld will cause the cup to shrink enough to allow it to be easily removed.

5. To replace the bearing cup, heat the hub evenly as in step 3 above.
6. Remove the hub from the oven or water quickly and press in the new bearing cup. Be sure the cup is properly aligned and fully seated. Take care to avoid damage to the bearing bore and shoulder. Be sure both cups are fully seated before installing the hub. If the cup is being pressed into an unheated hub, additional installation force will be required. To reduce the installation force the cup can be put in a freezer for an hour prior to installation.



## Seal Replacement

1. The seal should be replaced every time the hub is removed from the spindle.
2. Follow the seal manufacturers instructions for removing and installing a new seal. Use the tools recommended by the seal manufacturer.

## Con Met PreSet Hubs.

### INSTALLATION:

1. All PreSet hubs are shipped ready for installation with a thin film of lubricant on the bearings. (Additional lubricant will have to be added after installation). Use only clean parts for service.
2. Install the PreSet hub all the way onto the spindle. Allow the temporary plastic alignment sleeve, if present, to be pushed out of the PreSet hub as it is installed onto the spindle. If an alignment sleeve was present, it can be discarded.  
Once the hub is on the spindle, **Never remove the outer bearing.** Removing the outer bearing may cause the seal to become misaligned, resulting in premature seal failure.
3. Remove the temporary plastic bearing cover and install the spindle nut. Torque the spindle nut to 400 Nm. (300 lbft.) Do not back off the spindle nut. It may be necessary to tighten the spindle nut a little more to allow the alignment of the lock washer with the spindle nut. Install the lock tab washer and outer lock nut, torque the lock nut to 280 Nm. (200 lbft.)
4. Install the hub cap on the hub. The hub cap bolt holes must be free of debris, such as silicon gasket sealer, to ensure that the bolts will tighten properly to avoid leaks. Always use new gaskets. Use the recommended lubricants to fill the hub, with oil lubricated hubs it may be necessary to add oil to the hub three or four times to assure the correct oil volume.

## Con Met PreSet Hub Installation

Torque Applied to all Spindle Nuts
<b>300 lb.ft. (400 Nm.) LOCK IN PLACE - NO BACK OFF</b>
If the locking device is not aligned and locked at 300 lb.ft. (400 Nm.) advance the nut to the next position that allows the nut to lock. Check the nut and verify that the locking system is engaged before installing the hub cap.

### PART NUMBER IDENTIFICATION

Description	York Part No.	Timken Part No.
Outer Bearing Cone	79.787955/01	NP899357
Outer Bearing Cup	79.787955/02	NP026773
Inner Bearing Cone	79.787956/01	NP965350
Inner Bearing Cup	79.787956/02	NP503727
PreSet Bearing Spacer	79.104144	



# CREWSON BRUNNER

## AUTOSLACK FIELD INSPECTION

No Autoslack can compensate for braking System Deficiencies. The brakes should be in good operating condition and be well maintained. Crewson Brunner Autoslacks should not require manual adjustment except for initial installation and brake relines. The Autoslack unit must be installed with a Crewson brunner clevis and template.

**By constantly manually readjusting the Autoslack Adjuster, the internal clutch life can be shortened.**

## AUTOSLACK ON THE VEHICLE

### Free Stroke

Free stroke is the distance the slack arm moves in order to make the brake shoes contact the drum. Move the slack arm with a small pry bar and measure the movement distance. This distance should be 10mm to 16mm.

If free stroke is greater than 16mm, check the foundation brake components. Repair and replace as needed.

### Push Rod Power Stroke

Measure the power stroke (the difference between when the brake is off and when air is fully applied) at 80 to 90 psi application pressure.

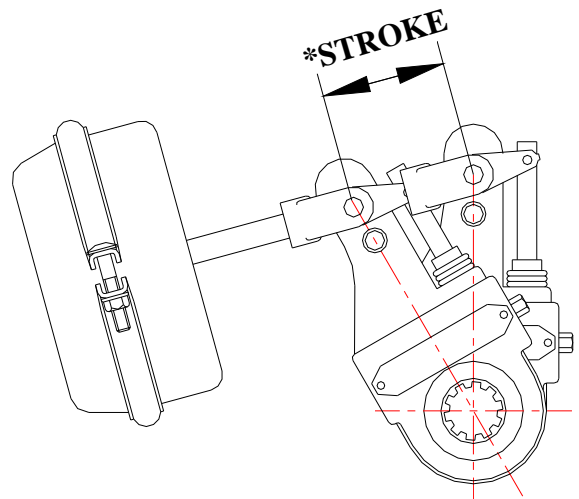
**\* This distance (Stroke) must be less than or equal to the maximum in the chart below.**

### Chamber Types

16, 20, 24  
30  
36

### Adjusted stroke

less than or equal to 44mm.  
less than or equal to 51mm.  
less than or equal to 57mm.



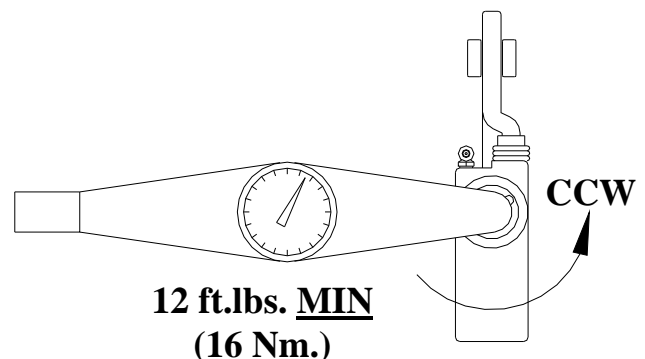
**\* If the stroke is correct the Autoslack is operating properly. No other tests are necessary.**

### Back Torque

With the Autoslack correctly installed on the axle, Back Torque (CCW Rotation) can be measured. Using a torque wrench, turn the Adjusting Hex CCW. Back Torque will increase to a peak value, then return to zero as the ratchet clutch disengages.

**Replace Autoslack if the Back (CCW) Torque reading is less than 12 ft.lbs. (16 Nm.)**

**Rotate the Hex shaft a maximum of 5 clicks (ratchet teeth) while taking torque readings.**





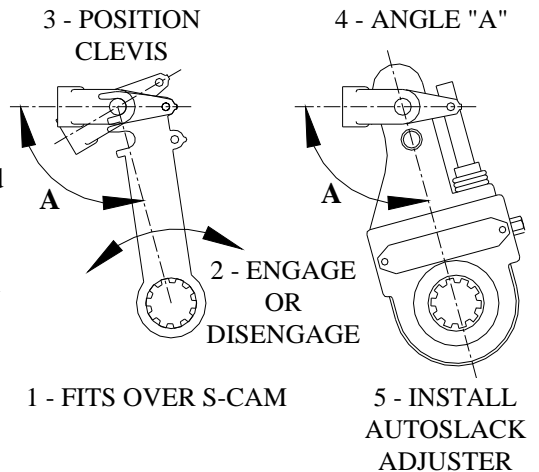
## **AUTOSLACK REMOVED FROM VEHICLE:**

Crewson Brunner Autoslacks are fully lubricated at the factory. A grease fitting is provided for normal maintenance.

Crewson Brunner Autoslacks can not be disassembled in the field. Never tamper with the units factory settings.

### **Verify Autoslacks Set Up**

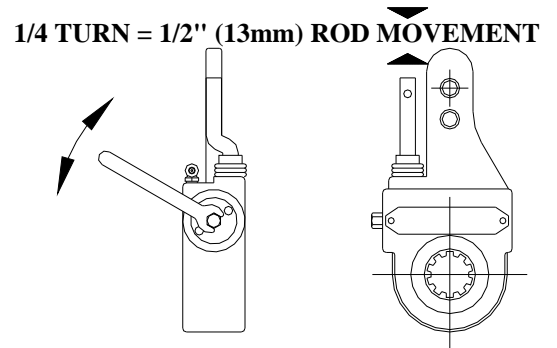
1. Select the correct template for the spline size and armhole location.
2. Fit Installation Template over S-Cam and put 1/2" pin into clevis.
3. Swing Template to engage 1/2" pin.
4. Screw clevis CW or CCW on push rod until 1/4" holes in clevis and template line up.
5. Template now indicates correct set up angle "A".
6. Remove template and 1/2" pin. Install Autoslack adjuster on S-Cam and turn the Hex nut CW until 1/2" and 1/4" holes line up with the clevis.
7. Install and secure clevis pins. Turn nut CW until shoes contact the brake drum.
8. Back off Hex nut one half turn CCW to complete setup.



### **Actuation Rod Movement**

The Actuation rod will move as a slight force is used to turn the adjusting Shaft hex. 1/4 of a turn will cause full movement of the Actuation Rod. Full movement of the Actuation rod is about 1/2".

- \* **Clockwise (CW) movement of the Adjusting Shaft Hex will move the Actuation Rod into the Slack Body.**
- \* **Counter Clockwise (CCW) movement of the Adjusting Shaft Hex will move the Actuation Rod out of the Slack Body.**



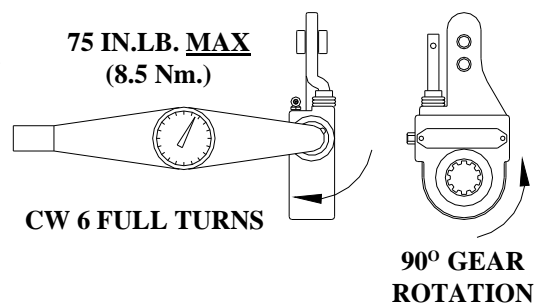
**Replace Autoslack if Actuation rod does not move.**

### **Gear Movement & Front Torque**

Using a torque wrench, rotate Adjusting hex nut through 6 full revolutions. Front Torque will increase to a peak value then return to zero several times on each revolution.

- \* The spline should rotate about 90 degrees.
- \* The Front (CW) Torque should be less than 75 in.lbs. (8.5 Nm.)

**Replace Autoslack if spline does not rotate or if torque readings are greater than 75 in.lbs. (8.5Nm.)**

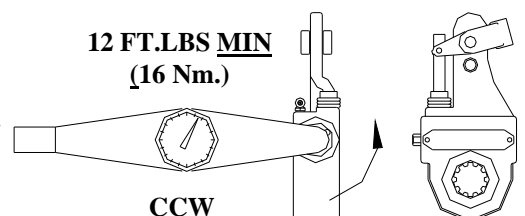


### **Back Torque**

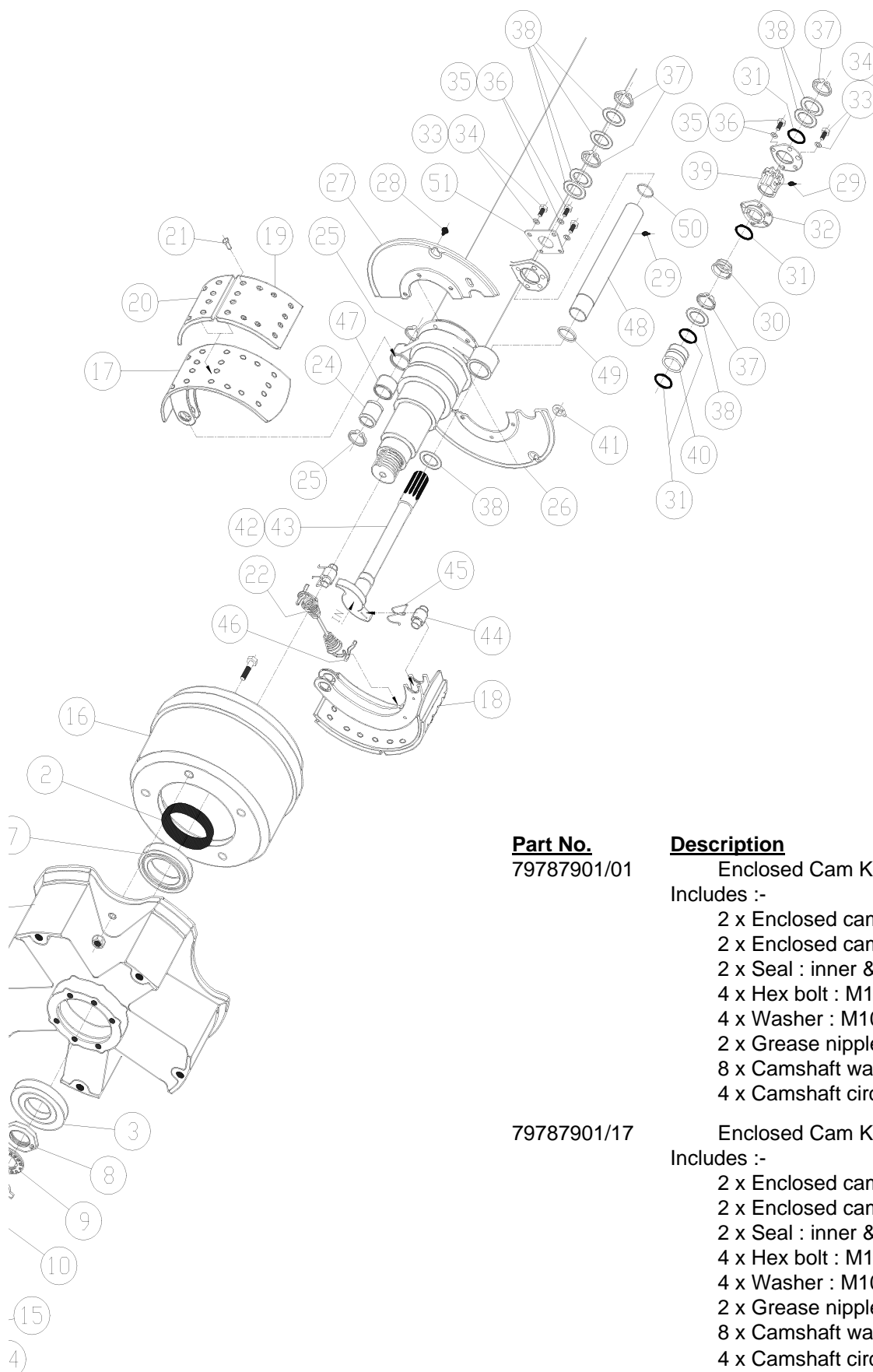
Assemble a crewson brunner clevis to the Autoslack Body and the Actuation Rod with the clevis pins. Using a torque wrench, turn the adjusting Shaft Hex CCW. Back torque will increase to a peak value, then return to zero as the ratchet clutch disengages.

**Replace Autoslack if the Back (CCW) Torque reading is less than 12 ft.lbs. (16 Nm.)**

**Rotate the Hex shaft a maximum of 5 clicks (ratchet teeth) while taking torque readings.**



# **AXLE TYPES 2782 and 2784 - 420 x 180 'S' CAM BRAKES** **DUAL and SUPER SINGLE SPIDER HUBS**



## **Part No.**

79787901/01

## **Description**

Enclosed Cam Kit (short cams)

Includes :-

- 2 x Enclosed cam tube (std)
- 2 x Enclosed cam tube mtg. plate
- 2 x Seal : inner & outer
- 4 x Hex bolt : M10x20 & M12x20
- 4 x Washer : M10 & M12
- 2 x Grease nipple (6mm straight)
- 8 x Camshaft washer
- 4 x Camshaft circlip

79787901/17

Enclosed Cam Kit (long cams)

Includes :-

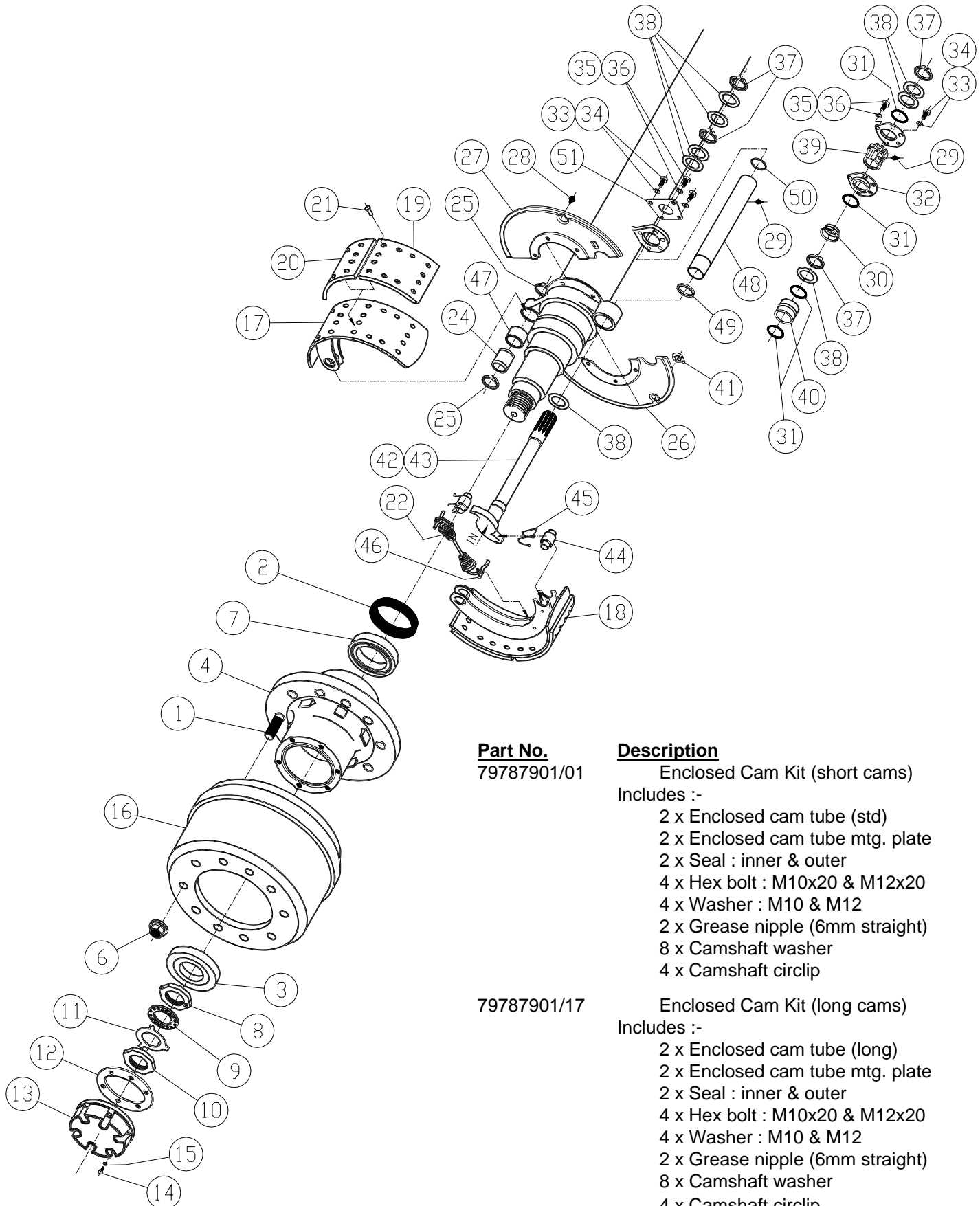
- 2 x Enclosed cam tube (long)
- 2 x Enclosed cam tube mtg. plate
- 2 x Seal : inner & outer
- 4 x Hex bolt : M10x20 & M12x20
- 4 x Washer : M10 & M12
- 2 x Grease nipple (6mm straight)
- 8 x Camshaft washer
- 4 x Camshaft circlip

## AXLE TYPES 2782 and 2784 - 420 x 180 'S' CAM BRAKES DUAL and SUPER SINGLE SPIDER HUBS

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	79787581	Wheel stud
2	79786114	Hub seal
3	79786510/1	Outer bearing (cone) HM212049
	79786510/2	Outer bearing (cup) HM212011
4	79SB787579	Spider hub assembly dual
	7927051	Spider hub super single
5	79786869	Rim clamp - dual
6	79787582	Spider wheel nut
7	79786117/01	Inner bearing (cone) HM218248
	79786117/02	Inner bearing (cup) HM2182
8	79502461	Spindle nut
9	79501123	Spindle lockwasher
10	79502462	Spindle locknut
11	79790044	Locktab washer
12	79787719	Gasket
13	79501785	Hub cap - oil
	79501715	Hub cap - grease
14	49HB5/16UNC1.00	Hub cap stud 5/8"UNC
15	49AW5/16P	Washer-hub cap stud
16	79787580	Brake drum-dual
	7960327-9	Brake drum-super single
17	79787525	Unlined shoe - 'Q'
	79502906/01	Unlined shoe - 'P'
18	79787902/02	Lined shoe - 'Q'
	79502064/02	Lined shoe - 'P'
19	79786281/02	Lining cam end (non asb)
20	79786282/02	Lining anchor end (non asb)
21	79502245	Rivet
22	79786289	Return spring cam end
	79787527	Return spring anchor end 'Q'
24	79787526	Anchor pin 'Q'
	79787997	Anchor pin - bolt on type
	79787723	Anchor pin 'P' heavy duty
26	79786336	Dust cover - RH
27	79786335	Dust cover - LH
28	49FHM08125012	Screw dust cover
29	79786885	Grease nipple 6mm straight

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
30	79500686	Dust seal
31	79500375	'O' Ring
32	79500363	Spherical bush housing
33	49HBM12175020	Hex bolt M12
34	49AWM12P	Lockwasher M12
35	49HBM10150020	Hex bolt M10
36	49AWM10P	Lockwasher M10
37	79500374	Camshaft circlip
38	79500358	Camshaft washer
39	79500362	Spherical bush
40	79502765	Outer cam bush
41	79500848	Plug dust cover
42	79504723/01R	Camshaft RH (short) 525mm
	79504723/01L	Camshaft LH (short) 525mm
43	79504723/17R	Camshaft RH (long) 627mm
	79504723/17L	Camshaft LH (long) 627mm
44	79500356/02	Cam roller 11/4" (knurled)
45	79500373	Cam roller retainer spring
46	79500372	Return spring retainer
47	79501787	Anchor pin bush
48	79788529/01	Enclosed cam tube (std 525mm)
	79788529/17	Enclosed cam tube (long 627mm)
49	79787721	Seal - hub end enclosed cam
50	79787720	Seal - inner end enclosed cam
51	79787590	Enclosed cam tube mtg plate
#	79B2-182	Rim clamp - super single
#	79787905	Slack adjuster
#	7921103	Automatic slack adjuster
#	798959051554	ABS pole wheel 100 tooth
#	794410326340	ABS Sensor pole
#	798997605104	ABS sensor pole bush
#	79787591	ABS sensor pole mounting block
#	796550/3	Hubcap window kit
	79506221	Booster bracket
	79786275	Brake spider
	79787904	Non enclosed cam repair kit
#	8512454-010	Spacer band 4"
	79/ABS301	ABS Sensor pole kit

# **AXLE TYPES 2782 and 2784 - 420 x 180 'S' CAM BRAKES** **DUAL and SUPER SINGLE STUD TYPE HUBS**



**Part No.**  
79787901/01

## **Description**

Enclosed Cam Kit (short cams)

Includes :-

- 2 x Enclosed cam tube (std)
- 2 x Enclosed cam tube mtg. plate
- 2 x Seal : inner & outer
- 4 x Hex bolt : M10x20 & M12x20
- 4 x Washer : M10 & M12
- 2 x Grease nipple (6mm straight)
- 8 x Camshaft washer
- 4 x Camshaft circlip

79787901/17

Enclosed Cam Kit (long cams)

Includes :-

- 2 x Enclosed cam tube (long)
- 2 x Enclosed cam tube mtg. plate
- 2 x Seal : inner & outer
- 4 x Hex bolt : M10x20 & M12x20
- 4 x Washer : M10 & M12
- 2 x Grease nipple (6mm straight)
- 8 x Camshaft washer
- 4 x Camshaft circlip

## AXLE TYPES 2782 and 2784 - 420 x 180 'S' CAM BRAKES

### DUAL and SUPER SINGLE STUD TYPE HUBS

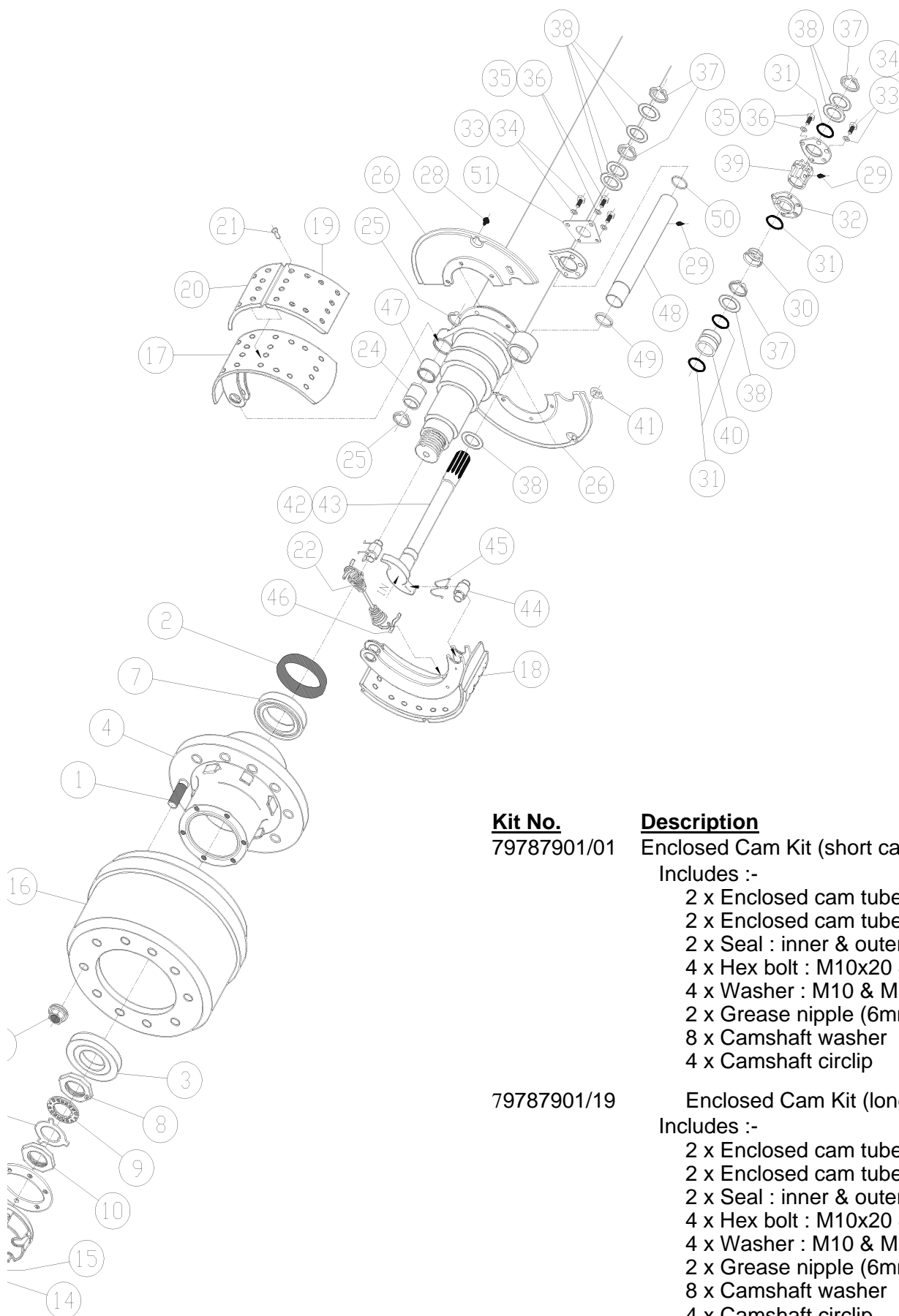
<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	79786111	Wheelstud ISO 100mm
	79786511	Wheelstud ISO 124mm
	79792155	Wheelstud SAE 100mm
	79792156	Wheelstud SAE 122mm
	79786506	Wheelstud Japanese R.H. M20
	79786507	Wheelstud Japanese L.H. M20
	79102188	Wheelstud M22 short (alum. hub)
	79102190	Wheelstud M22 long (alum. hub)
2	79786114	Hub seal
3	79786510/1	Outer bearing (cone) HM212049
	79787955/01	Outer bearing (cone) (pre set)
	79786510/2	Outer bearing (cup) HM212011
	79787955/02	Outer bearing (cup) (pre set)
4	79786106	Steel hub 10 x 335pcd (pre 1995)
	79787712	Steel hub 10 x 335pcd
	79787531	Steel hub 10 x 285pcd
	79787891	Steel hub 8 x 285pcd (Jap)
	79104894	Alum hub 10 x 285pcd (pre-set)
	79105366	Alum hub 10 x 335pcd (pre-set)
6	79502917/01	M22 ISO Wheelnut
	79790001	Japanese wheelnut set RH
	79790002	Japanese wheelnut set LH
7	79786117/01	Inner bearing (cone) HM218248
	79787956/01	Inner bearing (cone) (pre set)
	79786117/02	Inner bearing (cup) HM218210
	79787956/02	Inner bearing (cup) (pre set)
8	79502461	Spindle nut
9	79501123	Spindle lockwasher
10	79502462	Spindle locknut
11	79790044	Locktab washer
12	79787719	Hub cap gasket 6 hole
13	79501785	Hub cap - oil 6 hole
	79501715	Hub cap - grease 6 hole
	79786215	Hub cap - grease 3 hole
14	49HB5/16UNC1.00	Hub cap stud 5/16"UNC
	49HBM08125025P	Hub cap stud M8
15	49AW5/16P	Washer - hub cap stud
16	79787571	Brake drum 10 x 335pcd
	79786875	Brake drum 10 x 285pcd
	79790204	Brake drum 8 x 285pcd Jap(i/board)
	79786108	Brake drum 10 x 335pcd
	79ML100	Brake drum 10 x 285pcd
	79787886	Brake drum 10 x 285pcd-Lightweight
17	79787525	Unlined shoe - 'Q'
	79502906/01	Unlined shoe - 'P'
18	79787902/02	Lined shoe - 'Q'
	79502064/02	Lined shoe - 'P'
19	79786281/02	Lining cam end (Non Asb.)
20	79786282/02	Lining anchor end (Non Asb.)

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
21	79502245	Rivet
22	79786289	Return spring cam end
	79787527	Return spring anchor end 'Q'
24	79787526	Anchor pin 'Q'
	79787997	Anchor pin - bolt on type
	79787723	Anchor pin 'P' heavy duty
26	79786336	Dust cover RH
27	79786335	Dust cover LH
28	49FHM08125012	Screw dust cover
29	79786885	Grease nipple 6mm straight
30	79500686	Dust seal
31	79500375	'O' Ring
32	79500363	Spherical bush housing
33	49HBM12175020	Hex bolt M12
34	49AWM12P	Lockwasher M12
35	49HBM10150020	Hex bolt M10
36	49AWM10P	Lockwasher M10
37	79500374	Camshaft circlip
38	79500358	Camshaft washer
39	79500362	Spherical bush
40	79502765	Outer cam bush
41	79500848	Plug dust cover
42	79504723/01R	Camshaft RH (short) 525mm
	79504723/01L	Camshaft LH (short) 525mm
43	79504723/17R	Camshaft RH (long) 627mm
	79504723/17L	Camshaft LH (long) 627mm
44	79500356/02	Cam roller 11/4" (knurled)
45	79500373	Cam roller retainer spring
46	79500372	Return spring retainer
47	79501787	Anchor pin bush
48	79788529/01	Enclosed cam tube (std) 525mm
	79788529/17	Enclosed cam tube (long) 627mm
49	79787721	Seal - hub end enclosed cam
50	79787720	Seal - inner end enclosed cam
51	79787590	Enclosed cam tube mtg plate
#	798959051554	ABS pole wheel 100 tooth
#	79105459	ABS sensor ring (alum hub)
#	794410326340	ABS sensor pole
#	798997605104	ABS sensor pole kit
#	79787591	ABS sensor mounting block
#	79787905	Slack adjuster
#	7921103	Automatic slack adjuster
#	79506221	Booster bracket
#	796550/3	Hubcap window kit
#	79786275	Brake spider
#	79787904	Non enclosed cam repair kit
#	79104144	Pre set bearing spacer
#	79ABS301	ABS Sensor Pole Kit

\*Steel hubs do not include bearings, studs or nuts.

\*Aluminium hubs include bearing cups/cones & wheelstuds.

## AXLE TYPE 2950 - 335 x 210 'S' CAM BRAKES



### Kit No.

79787901/01

### Description

Enclosed Cam Kit (short cams)

Includes :-

- 2 x Enclosed cam tube (std)
- 2 x Enclosed cam tube mtg. plate
- 2 x Seal : inner & outer
- 4 x Hex bolt : M10x20 & M12x20
- 4 x Washer : M10 & M12
- 2 x Grease nipple (6mm straight)
- 8 x Camshaft washer
- 4 x Camshaft circlip

79787901/19

Enclosed Cam Kit (long cams)

Includes :-

- 2 x Enclosed cam tube (long)
- 2 x Enclosed cam tube mtg. plate
- 2 x Seal : inner & outer
- 4 x Hex bolt : M10x20 & M12x20
- 4 x Washer : M10 & M12
- 2 x Grease nipple (6mm straight)
- 8 x Camshaft washer
- 4 x Camshaft circlip

## AXLE TYPE 2950 - 335 x 210 'S' CAM BRAKES

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	79786111	Wheelstud ISO 100mm
	79792155	SAE Wheelstud 100mm
	79786511	Wheelstud ISO 124mm
	79792156	SAE Wheelstud 122mm
	79102190	Wheelstud alum hub (long)
2	79786114	Hub seal
3	79786510/1	Outer bearing (cone) HM212049
	79786510/2	Outer bearing (cup) HM212011
4	7927140	3 spoke spider hub
	79792161	Steel hub 10 x 225pcd
	79787674	Steel hub 8 x 225pcd
	79787705	Steel hub 8 x 275pcd
	79104906	Alum hub 8 x 275pcd (pre-set)
6	79502917/01	Wheelnut ISO
7	79786117/01	Inner bearing (cone) HM218248
	79786117/02	Inner bearing (cup) HM218210
8	79502461	Spindle nut
9	79501123	Spindle lockwasher
10	79502462	Spindle locknut
11	79790044	Locktab washer
12	79787719	Hub cap gasket - 6 hole
13	79501715	Hub cap - grease 6 hole
	79501785	Hub cap - oil 6 hole
	79786215	Hub cap - grease 3 hole
14	49HB5/16UNC1.00	Hub cap stud 5/16"UNC
	49HBM08125025P	Hub cap stud M8
15	49AW5/16P	Washer - hub cap stud
16	79786856	Brake drum spider
	79792163	Brake drum 10x225pcd (i/board)
	79787675	Brake drum 8x225pcd (i/board)
	79787704	Brake drum 8x275pcd (o/board)
17	79788845	Unlined brake shoe (bonded)
18	79787650/04	Lined brake shoe (bonded)
19	79506464/02	Lining cam end (drilled) Early
	79788846/02	Lining cam end (drilled)
20	79506464/02	Lining anchor end(drilled)
	79788847/02	Lining anchor end (drilled)
21	79502245	Rivet
22	79506498	Return spring
24	79787997	Anchor pin - bolt on type
26	79506414	Dust cover
28	49FHM08125012	Dust cover screw
29	79786885	Grease nipple 6mm straight

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
30	79500686	Dust seal
31	79500375	'O' Ring
32	79501574	Spherical bush housing
33	49HBM12175020	Hex bolt M12
34	49AWM12P	Lockwasher M12
35	49HBM10150020	Hex bolt M10
36	49AWM10P	Lockwasher M10
37	79500374	Camshaft circlip
38	79500358	Camshaft washer
39	79500362	Spherical bush
40	79502765	Outer cam bush
41	79500848	Plug dust cover
42	79790238/01R	Camshaft RH 525mm
	79790238/01L	Camshaft LH 525mm
43	79790238/19R	Camshaft RH 616mm
	79790238/19L	Camshaft LH 616mm
44	79500356/02	Cam roller 11/4" (knurled)
45	79500373 (opt)	Cam roller retainer spring
	79787722 (std)	Cam roller retainer-bolt on
46	79500372	Return spring retainer
47	79501787	Anchor pin bush
48	79788529/01	Enclosed cam tube: std
	79788529/19	Enclosed cam tube: long
49	79787721	Seal: hub end encl cam
50	79787720	Seal: inner end encl cam
51	79787590	Encl cam tube mtg plate
#	798959051554	ABS pole wheel 100 tooth
	79105459	ABS sensor ring(alum hub)
	794410326340	ABS sensor pole
	798997605104	ABS sensor pole bush
#	79787591	ABS sensor mounting block
#	79787905	Slack adjuster
#	7921123	Automatic slack adjuster
#	796550/3	Hubcap window kit
#	79ABS301	ABS Sensor Kit

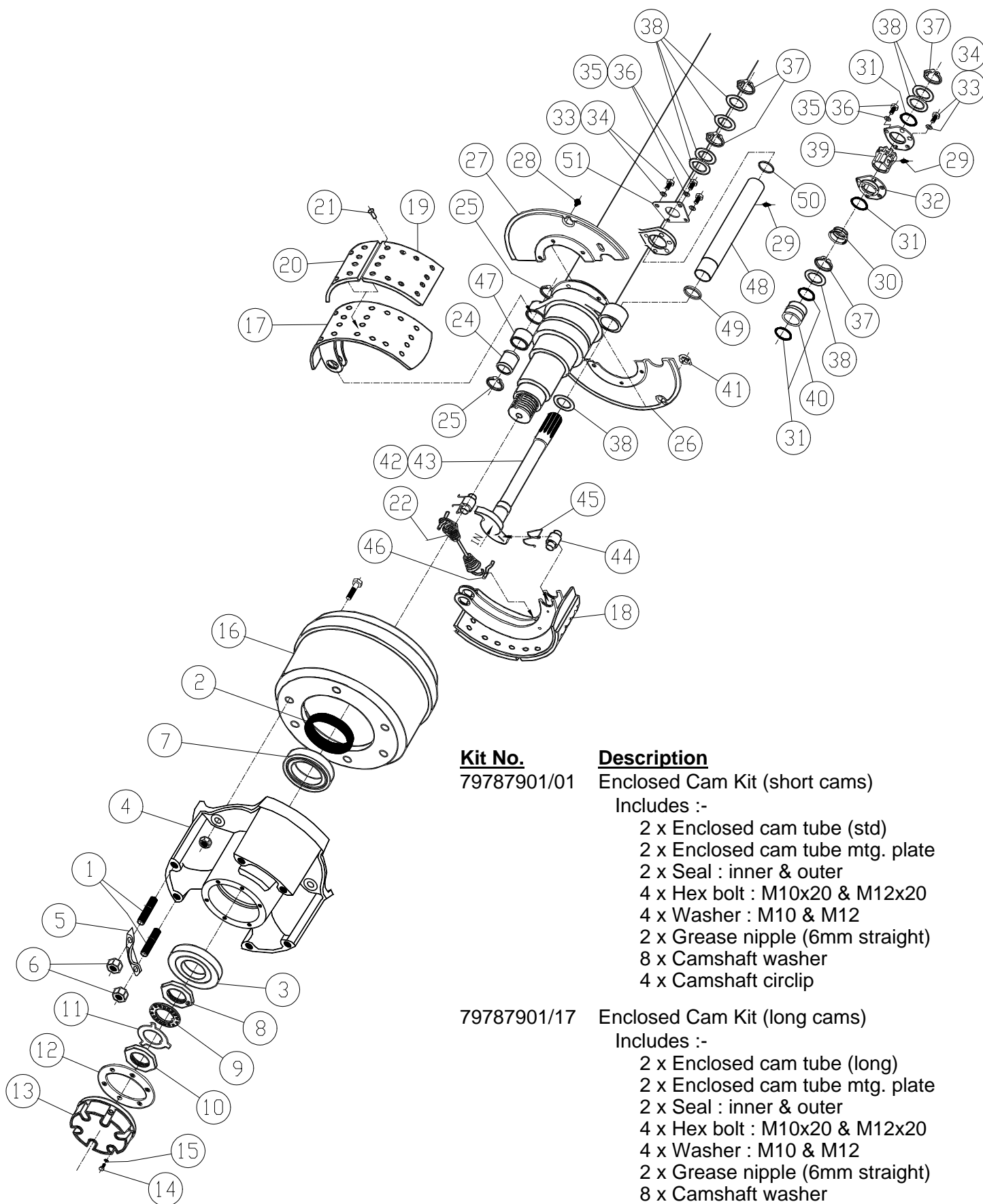
### Preset bearing hub spares

79787955/01	Outer bearing cone
79787955/02	Outer bearing cup
79787956/01	Inner bearing cone
79787956/02	Inner bearing cup
79104144	Preset bearing spacer

**\*Steel hubs do not include bearings, studs or nuts.**

**\*Aluminium hubs include bearing cups/cones & wheelstuds.**

**AXLE TYPE 2783 / 2953, 15" AXLE - 311 x 178 'S' CAM BRAKES**  
**AXLE TYPE 2954, - 311 x 127 'S' CAM BRAKES**



**Kit No.**

79787901/01

**Description**

Enclosed Cam Kit (short cams)

Includes :-

- 2 x Enclosed cam tube (std)
- 2 x Enclosed cam tube mtg. plate
- 2 x Seal : inner & outer
- 4 x Hex bolt : M10x20 & M12x20
- 4 x Washer : M10 & M12
- 2 x Grease nipple (6mm straight)
- 8 x Camshaft washer
- 4 x Camshaft circlip

79787901/17

Enclosed Cam Kit (long cams)

Includes :-

- 2 x Enclosed cam tube (long)
- 2 x Enclosed cam tube mtg. plate
- 2 x Seal : inner & outer
- 4 x Hex bolt : M10x20 & M12x20
- 4 x Washer : M10 & M12
- 2 x Grease nipple (6mm straight)
- 8 x Camshaft washer
- 4 x Camshaft circlip



**AXLE TYPE 2783 / 2953, 15" AXLE - 311 x 178 'S' CAM BRAKES**  
**AXLE TYPE 2954, - 311 x 127 'S' CAM BRAKES**

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	79787581	Wheel stud
	79786506	Wheel stud Japanese RH
	79786507	Wheel stud Japanese LH
2	79786114	Hub seal
3	79786510/1	Outer bearing (cone) HM212049
	79786510/2	Outer bearing (cup) HM212011
4	7927140	3 spoke spider hub
	79787595	Steel hub 6 x 222pcd
	79792161	Steel hub 10 x 225pcd
5	793314	Wheel clamp
6	79787582	Wheel nut
	79790001	Wheel nut Japanese RH
	79790002	Wheel nut Japanese LH
7	79786117/01	Inner bearing (cone) HM218248
	79786117/02	Inner bearing (cup) HM218210
8	79502461	Spindle nut
9	79501123	Spindle lockwasher
10	79502462	Spindle locknut
11	79790044	Locktab washer
12	79787719	Hub cap gasket - 6 hole
13	79501785	Hub cap - oil 6 hole
	79501715	Hub cap - grease 6 hole
	79786215	Hub cap - grease 3 hole
14	49HB5/16UNC1.00	Hub cap stud 5/8"UNC
	49HBM08125025P	Hub cap stud M8
15	49AW5/16P	Washer - hub cap stud
16	7960328-6	Brake drum spider
	79787598	Brake drum 6x222pcd, 311x178
	79787900	Brake drum 6x222pcd, 311x127
	79792164	Brake drum 10 x 225pcd
17	79502904/02	Brake shoe unlined, 311x178
	79502904/01	Brake shoe unlined, 311x127
18	79502246/02	Lined brake shoe, 311x178
	79502263/02	Lined brake shoe, 311x127

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
19	79501570/02	Lining cam, 311x178
	79501572/02	Lining anchor, 311x178
20	79501568/02	Lining cam end, 311x127
	79501571/02	Lining anchor end, 311x127
21	79502245	Rivet
22	79501551	Brake return spring
24	79787997	Anchor pin - bolt on type
26	79501576	Dust cover RH
27	79501577	Dust cover LH
28	49FHM08125012	Screw dust cover
30	79500686	Dust seal
31	79500375	'O' Ring
32	79501574	Spherical bush housing
33	49HBM12175020	Hex bolt M12
34	49AWM12P	Lockwasher M12
37	79500374	Camshaft circlip
38	79500358	Camshaft washer
35	49HBM10150020	Hex bolt M10
29	79786885	Grease nipple 6mm straight
39	79500362	Spherical bush
36	49AWM10P	Lockwasher M10
40	79502765	Outer cam bush
41	79500848	Plug dust cover
42	79504742/01R	Camshaft RH 525mm
	79504742/01L	Camshaft LH 525mm
43	79504742/19R	Camshaft RH 616mm
	79504742/19L	Camshaft LH 616mm
44	79500356	Cam roller 11/8"
45	79500373	Cam roller retainer spring
	79787722	Cam roller retainer - bolt on
46	79500372	Return spring retainer
47	79501787	Anchor pin bush
48	79788529/01	Enclosed cam tube (std 525mm)
	79788529/19	Enclosed cam tube (long 616mm)
49	79787721	Seal - hub end enclosed cam
50	79787720	Seal - inner end enclosed cam
51	79787590	Enclosed cam tube mtg plate
#	79787905	Slack adjuster
#	79271405	Hub/Drum assembly 15" spider

**\* Steel stud hubs do not include bearing cups,  
wheel studs or wheel nuts.**